3.1.3 Fish Species of Greatest Conservation Need

3.1.3.1 Overview

There are 147 native fish species in Wisconsin. Of these 147 species, 30 (20%) have been identified as Species of Greatest Conservation Need in Wisconsin. Thirteen are currently listed as Threatened or Endangered in Wisconsin. Species of Greatest Conservation Need are divided into three groups based on their relative abundance in Wisconsin in comparison with the rest of their range. These divisions address the global role Wisconsin plays in the conservation of these species but leave options open for management.

Table 3-3. Fish Species of Greatest Conservation Need

Species with a high relative abundance in Wisconsin compared with the rest of their range		
Common Name	***Scientific Name***	***Page***
Lake Sturgeon	*Acipenser fulvescens*	*3-175*
Kiyi	*Coregonus kiyi*	*3-182*
Shortjaw Cisco	*Coregonus zenithicus*	*3-183*
Redside Dace	*Clinostomus elongatus*	*3-185*
Pugnose Shiner	*Notropis anogenus*	*3-188*
Blue Sucker	*Cycleptus elongatus*	*3-195*
Greater Redhorse	*Moxostoma valenciennesi*	*3-203*
Crystal Darter	*Ammocrypta (Crystallaria) asprella*	*3-212*
Western Sand Darter	*Ammocrypta clara*	*3-213*
Species with a moderate to low relative abundance in Wisconsin compared with the rest of their range		
Common Name	***Scientific Name***	***Page***
Paddlefish	*Polyodon spathula*	*3-177*
Ozark Minnow	*Notropis nubilus*	*3-190*
Gravel Chub	*Erimystax x-punctatus*	*3-191*
Redfin Shiner	*Lythrurus umbratilis*	*3-193*
Shoal Chub (Speckled Chub)	*Macrhybopsis hyostoma*	*3-194*
Lake Chubsucker	*Erimyzon sucetta*	*3-196*
Black Buffalo	*Ictiobus niger*	*3-198*
River Redhorse	*Moxostoma carinatum*	*3-200*
Black Redhorse	*Moxostoma duquesnei*	*3-202*
Slender Madtom	*Noturus exilis*	*3-205*
Banded Killifish	*Fundulus diaphanus*	*3-206*
Starhead Topminnow	*Fundulus dispar*	*3-208*
Longear Sunfish	*Lepomis megalotis*	*3-210*
Least Darter	*Etheostoma microperca*	*3-215*
Gilt Darter	*Percina evides*	*3-216*
Species with a very low relative abundance in Wisconsin compared with the rest of their range		
Common Name	***Scientific Name***	***Page***
American Eel	*Anguilla rostrata*	*3-179*
Skipjack Herring	*Alosa chrysochloris*	*3-180*
Goldeye	*Hiodon alosoides*	*3-181*
Pallid Shiner	*Notropis amnis*	*3-187*
Striped Shiner	*Luxilus chrysocephalus*	*3-192*
Bluntnose Darter	*Etheostoma chlorosoma*	*3-214*

3.1.3.2 General Threats, Issues and Conservation Actions

General Threats and Issues Affecting Fish Species of Greatest Conservation Need

Habitat loss or destruction is one of the primary threats facing fish Species of Greatest Conservation Need in Wisconsin. For example, dams, agriculture, shoreline modification and development, and urbanization can all negatively impact aquatic habitats and threaten species within those systems. Similarly, point and non-point source pollution, the latter often a result of runoff and sedimentation from poor agricultural practices within the watershed, are well known threats to aquatic systems. Transportation infrastructure, including the many lock and dam structures for commercial navigation along the Mississippi River, is another important factor threatening many of our fish Species of Greatest Conservation Need by fragmenting and degrading habitat. Aquatic invasive species (e.g. several species of Asian carp, non-native aquatic plants) which may compete with native species and degrade habitat are another common threat facing fish Species of Greatest Conservation Need in Wisconsin. Specific threats affecting individual fish Species of Greatest Conservation Need are listed on the following pages.

General Conservation Actions for Fish Species of Greatest Conservation Need

Protection and restoration of aquatic habitats on both public and private lands is one of the primary actions proposed for conserving fish Species of Greatest Conservation Need in Wisconsin. Protecting our waters, focusing for example on protection of specific refuge areas such as important spawning grounds or known locations which harbor very rare species within watersheds, will also be important to the conservation of many species. Many of our fish Species of Greatest Conservation Need are found only in large river systems such as the Mississippi and Wisconsin rivers, which have been highly altered for commercial navigation and other purposes; restoration of the natural processes that characterize these systems would help to conserve many of these species by providing the natural flow regime, connectivity and specific habitats that these large river species need throughout their life cycles. Research is another area in need of critical action for many species—more information on status, distribution, populations trends, taxonomy, recruitment, habitat use, causes of decline and other factors is needed to adequately and more effectively work to conserve many species and their habitats. In many cases, protecting and enhancing riparian habitats and improving agricultural practices within the watershed would help to improve habitat and water quality within streams and rivers which support our fish Species of Greatest Conservation Need. Specific conservation actions proposed for individual fish Species of Greatest Conservation Need are listed on the following pages.

References for Specific Threats, Issues and Conservations Actions for Fish Species of Greatest Conservation Need

The following references, along with other sources, personal observations and unpublished data, provide background or justification for specific threats and conservation actions listed on the following pages for the individual fish Species of Greatest Conservation Need.

Becker, G.C. 1983. Fishes of Wisconsin. University of Wisconsin Press, Madison, Wisconsin, 1052 pp.

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NatureServe. 2005. NatureServe Explorer: An online encyclopedia of life [web application]. Version 4.4. NatureServe, Arlington, Virginia. Available http://www.natureserve.org/explorer. (Accessed: May 14, 2005).

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